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DUAL DISPLAY TYPE PORTABLE COMPUTER AND CONTROL METHOD FOR THE SAME

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention relates to a portable computer, and more particularly to a dual display type portable computer.

2. Background of the Related Art

FIG. 1 is a perspective view of a prior art notebook computer. As shown, a conventional notebook computer generally includes a body section 1 and a display section 3. The body section 1 and the display section 3 are connected with each other through a hinge unit 5. Through the hinge unit 5, the display section 3 is folded upon the body section 1 when the notebook computer is stored, and the display section 3 is unfolded from the body section 1 as shown in FIG. 1 when the notebook computer is used.

The body section 1 is shaped like a substantially flat board and contains a motherboard and various elements constituting the notebook computer. A keyboard 7, which operates as an input device, is disposed at an upper surface of the body section 1. The keyboard 7 has a plurality of keys arranged in multiple rows.

The display section 3 has a display module 9 on which various information is displayed. A liquid crystal panel is typically used as the display module 9. Signal lines are connected between the display section 3 and the body section 1 through the hinge unit 5 for transmission of signals between them.

A portable computer such as a notebook computer as described above has an integrated display section 3 including the display module 9, which is usually a liquid crystal panel, so that the portable computer can display a window screen image without a separate monitor in a simple and easy manner. Further, the display module 9 can display a video image reproduced by and outputted from an optical disc driver such as a CD driver or a DVD driver.

Meanwhile, a portable computer may be equipped with not only the display module such as a liquid crystal panel but also the display module 9 having input and output functions, such as a touch screen digitizer. In a touch screen as described above, a keyboard image may be displayed on a portion of the window screen image.

In such a portable computer having a touch screen as described above, a user can selectively input desired character buttons or key buttons in the keyboard image displayed on a portion of the window screen image. Also, a user can use the display module 9 to confirm or view a window screen image currently displayed by a liquid crystal display or a video image reproduced by and outputted from an optical disc driver.

As described above, however, the prior art portable computer has various disadvantages. For example, in order to use a portable computer with a large screen for displaying, e.g., a motion picture or performing such work as CAD or Spread Sheet, the portable computer needs to be connected with a separate monitor having a relatively large size, thereby causing inconvenience in use of the computer. Further, the keyboard device has only a specific language set in advance. Therefore, some device is necessary in order to input another language, for example, another keyboard must be connected to the portable computer.

The above references are incorporated by reference herein where appropriate for appropriate teachings of additional or alternative details, features and/or technical background.

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SUMMARY OF THE INVENTION

An object of the invention is to solve at least the above problems and/or disadvantages and to provide at least the advantages described hereinafter.

Another object of the present invention is to provide a portable computer that has a display screen on a main body and a display body.

Another object of the present invention to provide a portable computer that has a plurality of displays so that the portable computer can display a relatively large screen.

Another object of the present invention to provide a portable computer that has a plurality of displays so that the portable computer can use one display screen as an input device.

Another object of the present invention to provide a portable computer that has a plurality of displays and a hinge mechanism allowing a reduced separation between the displays.

Another object of the present invention to provide a portable computer that has a plurality of displays so that the displays can be unfolded from a body of the portable computer at various angles with respect to the body.

To achieve at least these objects and other advantages in a whole or in part and in accordance with the purpose of the invention, as embodied and broadly described herein, there is provided a hinge unit of a portable computer, the hinge unit including a fixed hinge plate fixed to a first unit having a first display module, the fixed hinge plate having a first hinge cylinder, a hinge link having a first hinge shaft rotatably inserted in the first hinge cylinder, the hinge link connecting the first unit with a second unit having a second display module, a movable hinge bracket assembled with the second unit and configured to be rotated about a second hinge shaft, the movable hinge bracket having a guide section for guiding the hinge link that is movably inserted through the movable hinge bracket, and a stopper disposed at a corresponding portion between the hinge link and the guide section of the movable hinge bracket to prevent the hinge link from moving with respect to the movable hinge bracket.

To further achieve at least these objects and other advantages in a whole or in part and in accordance with the purpose of the invention, as embodied and broadly described herein, there is provided a portable computer that includes a first unit having a first display module, a second unit being capable of being folded on and unfolded from the first unit, and a hinge mechanism configured to support reciprocal folding movements of the first and second units, wherein the hinge mechanism is positioned along a lateral area between the first display module and an outer lateral edge of the first unit.

To further achieve at least these objects and other advantages in a whole or in part and in accordance with the purpose of the invention, as embodied and broadly described herein, there is provided a dual display control method for a portable computer that includes displaying a window screen image and an input device image on a first display module and a second display module, respectively, which are included in the portable computer, and displaying at least one window screen image on both the first display module and the second display module according to a selection signal.

To further achieve at least these objects and other advantages in a whole or in part and in accordance with the purpose of the invention, as embodied and broadly described herein, there is provided a portable computer that includes a